

IGARSS 2000 ABSTRACT SUBMISSION

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ABSTRACT TITLE:

SeaWinds on QuikSCAT Value Added Products

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ABSTRACT TEXT:

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On June 19, 1999, the SeaWinds scatterometer instrument was successful launched aboard the QuikSCAT spacecraft. A scatterometer is a radar instrument which measures the wind speed and direction over the Earth's oceans. This data is used by researchers for both weather and climate prediction.

This paper will describe and demonstrate the SeaWinds Value-Added Products (SeaVAP) System, which was established at the Jet Propulsion Laboratory to: (1) produce visually informative images and animations of the SeaWinds data, and (2) make these products available via the World-Wide Web to researchers, meteorologists, media, educational institutions, and the general public in near real-time (within three hours of data acquisition). Due to the visual nature of the data, and also due to the timeliness with which weather information must be available in order to be useful, the web offers the perfect browsing and distribution mechanism. Rapid and intuitive interpretation of the scatterometer wind data is obtained both by incorporating the SeaWinds data with geosynchronous cloud imagery and by animation of the retrieved wind fields. Images of co-located surface winds and cloud data allow users to quickly place the scatterometer data into a greater meteorological context. Data visualization techniques employing animation have been particularly successful with scatterometer data, illustrating features such as cyclonic circulations and fronts that are not as readily apparent in still images. SeaWinds images and animations from this site have been utilized by the media in both broadcast and web based releases. A goal of the SeaVAP system is to provide twice daily "broadcast quality" digital animations of SeaWinds data for use by media via the web.

TOPIC PREFERENCE: B.4, Innovative Uses of the WWW